Unraveling the Mystery

Academic Tracks

Junior Investigators Symposium

April 16, 2019

Kathy N. Shaw, MD, MSCE
Professor and Associate Chair, Pediatrics (CE track)
AKA.... “how to initiate and maintain a successful research career at CHOP and Penn”

Initiate:
First step – know the path you’re on

Maintain:
A series of steps

Succeed:
Not just Promotion (ie, you get to stay at Penn) but career satisfaction
Focus Groups of Young Faculty

Then and now want to know the path...

Penn Faculty Affairs (from the website over a decade ago):

• “they wanted to know how to focus their energy at any given stage of their careers so as to achieve long term goals...”

Career Pathways @ CHOP (2016)

• Promotions criteria referred to as “lure” or “mystery”

• Need to know how to stay on track - “this is what you need to do at this time”/prescriptive pathway to success
Step 1: Getting to Know your Path...
# Tracks at the Perelman School of Medicine

## Perelman School of Medicine Faculty Track Descriptions

**Quick Reference Guide Revised 10/1/16**

<table>
<thead>
<tr>
<th>Distinguishing Features</th>
<th>Academic Clinician</th>
<th>Clinician Educator</th>
<th>Research</th>
<th>Tenure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Major Emphasis</strong></td>
<td>Clinical care, quality and safety, education including leadership roles in those domains</td>
<td>Focus of scholarly activity with effort that can vary over time.</td>
<td>Scholarly activity</td>
<td>Scholarly activity</td>
</tr>
<tr>
<td><strong>Role in research</strong></td>
<td>Not required but if occurs will be predominantly collaborative</td>
<td>Collaborative and sometimes investigator-driven</td>
<td>Collaborative and sometimes investigator-driven</td>
<td>Investigator driven, most as PI or one of multiple PIs</td>
</tr>
<tr>
<td><strong>Research effort</strong></td>
<td>May serve as PI/co-PI/sub-investigator for non-federally sponsored clinical research, PCORI grants and cooperative group trials. May not be PI/co-PI/sub-investigator on federally sponsored research.</td>
<td>Collaborative and sometimes investigator-driven</td>
<td>Collaborative and sometimes investigator-driven</td>
<td>Investigator driven, most as PI or one of multiple PIs</td>
</tr>
<tr>
<td><strong>Research Autonomy</strong></td>
<td>Generally collaborative</td>
<td>Collaborator and sometimes leader</td>
<td>Collaborator and sometimes leader</td>
<td>Leader</td>
</tr>
<tr>
<td><strong>Type of research</strong></td>
<td>Federally funded research activity limited to 10% effort/funding otherwise can accept role specific support.</td>
<td>Funding from nonoperational sources (Federal, foundation, industry, gifts, etc. after year 3)</td>
<td>Non institutional</td>
<td>Extramural: Federal and/or foundation, peer reviewed funding expected</td>
</tr>
</tbody>
</table>
| **Type of research**    | Clinical research that extends existing observations in a field or drives a field in new directions. | Research can include new observations or extend existing observations in a field. | Research that extends existing observations in a field, or that drives a field in new directions. | Research must define a new field or drive an existing field forward, as evidenced by the development of new principles, methods, or technology that substantially alters the genesis or application of information in that and/or other fields. **
| **Research outcome**    | Not required | Original papers in peer-reviewed journals with identifiable focus and impact, as either collaborator or lead author. Chapters, reviews, alternative media etc can support but not substitute for above. | Original papers as either a project leader or collaborator. | Original papers that must clearly highlight the individuals role in advancing the field. |
| **Level of external citation** | Not required | ++ | ++ | ++ |
| **H index**             | Not required | ++ | ++ | ++ |
| **First/Last Author emphasis** | Not required | ++ | ++ | ++ |
| **International/ National/Regional reputation** | Associate-Regional Full- National/International | Associate-Regional Full- National/International | Associate- National Full- International | Associate- National Full- International |

*Papers that include the name/names of senior faculty members provide evidence of leadership if the junior faculty candidate for promotion is recognized from the comments of extramural reviewers or Penn faculty members as the intellectual leader of the research effort. Promotion considerations should not inhibit junior faculty members from using seeking productive collaborations with others.**  **Any type of research can qualify, e.g., laboratory-based research, clinical research, public health research, bioethics research, or educational research. The branch or type of science (e.g., clinical vs basic research) represented by a faculty member's research program is not related to a specific track. What is important is the role they play in novel work that has a defined impact.
Shaping a Career in Academic Medicine: Guidelines for mentor/mentee Conversations

Table of Contents

Introduction

Guidelines for conversations with clinician-educator faculty

Begin with the end in mind
C-E’s Years One through Three
C-E’s Years Four through Six
C-E’s Years Seven through Nine

Guidelines for conversations with tenure-track faculty

Begin with the end in mind

Basic scientists
Years One through Three
Years Four through Six

COAP guidelines for promotion
Establishing a research focus
Increasing scholarly productivity
Gaining additional exposure

Establishing reputation as an independent investigator
Writing senior-authored papers
Career Roadmap
Review Group

CHOP

• Department of Pediatrics Executive Committee
• Associate Chairs
  (Drs. Sue Furth, Anne Reilly, Bob Shaddy, Kathy Shaw, Gail Slap)
• Department of Pediatrics Management Team
  (Eileen Drames, Kristi Ettien, Elaine Gallagher, Jamie Hoffman, Alison Marx, April Taylor)

Perelman School of Medicine (PSOM)

• Chair, Committee on Appointments and Promotions
• Vice Dean for Faculty Affairs
• Executive Director, Office of Faculty Affairs
What am I passionate about?
What job is available?

Exclusively Research (No Teaching)

Primarily Research
- Goal is to lead independent research as PI on external grants that support the majority of your efforts
  - Yes
  - Teach ≥ 100 credits per year; ≥ 50% to Penn/CHOP learners
  - Yes
  - PSOM Faculty Research Track/CHOP Research Scientist

Primarily Clinical
- Goal is to focus on the provision of excellent clinical care
  - Yes
  - Teach ≥ 100 credits per year; ≥ 50% to Penn/CHOP learners
  - Yes
  - PSOM Clinician (Clinical Track Faculty Appnt.)

Research, Clinical, and Teaching
- Goal is to lead and author original scholarly work in a specific area of expertise with distinct contributions and teach trainees
  - No
  - Yes
  - ≥ 30% research with expectation of ongoing research support in the future
  - No
  - Yes
  - PSOM Facultiy CE Track

Exclusively Clinical (No Teaching)

Primarily Clinical
- Goal is to focus on the provision of excellent clinical care
  - Yes
  - Teach ≥ 100 credits per year; ≥ 50% to Penn/CHOP learners
  - No
  - Yes
  - PSOM Clinician (Clinical Track Faculty Appnt.)

Primarily Clinical
- Goal is to focus on the provision of excellent clinical care
  - Yes
  - Teach ≥ 100 credits per year; ≥ 50% to Penn/CHOP learners
  - No
  - Yes
  - PSOM Clinician (Clinical Track Faculty Appnt.)
Investigator’s Symposium: Which Path?
- Research,
- Tenure,
- CE
PSOM Committee on Teaching and Educational Service:
Defining and Quantifying Teaching and Educational Effort

A major role of PSOM faculty is the dissemination of knowledge through teaching. The ability to value teaching is critically important for faculty reappointments, promotions and teaching awards as well as to formally document the level of teaching engagement by our faculty. The purpose of this document is provide a common language and value system for teaching across the school.

This definition will be effective September 1, 2018

1. Definition of Teaching

- The broad framework for teaching activities includes teaching directed to the broad Penn Community (including CHOP) as well as non-Penn audiences.
- The broad Penn community includes teaching provided to any group affiliated with the University of Pennsylvania and any educational programs or activities sponsored by Penn including:
  - Undergraduate, professional and post-baccalaureate students
  - Medical students
  - Residents and fellows
  - Post-doctoral fellows (or trainees)
  - Graduate students
  - Preprofessional students (NP’s, PA’s, Pharmacists etc)
  - Peers when taught on behalf of PSOM Advance Faculty development programs
  - Attendees at CME programs sponsored by Penn or CHOP
  - Students at secondary schools, local/regional community and 4-year colleges and universities when teaching occurs on behalf of Penn
- Evaluation data must be available to receive credit for teaching to non-Penn audiences; teaching for the Penn community receives teaching credit whether or not evaluation data are available

2. Annual Teaching expectations

- Tenure/CE/AC- minimum of 100 credits per year
- Clinical faculty appointments-minimum of 50 credits per year
- PSOM faculty are expected to devote at least 50% of their minimum requirement to the broad Penn community.
- While it is the intention of this policy that all faculty meet their annual teaching requirements in order to maintain their faculty appointment, department chairs will have discretion to modify teaching assignments for individual faculty to ensure that a department meets its teaching responsibilities and for other compelling reasons.
- As is current practice, faculty will be responsible for tracking and reporting their teaching activities using a PSOM or CHOP-provided standard template.
Excel for Teaching Credits

Credit for:
- mentoring
- supervised scholarship
- lab rotation supervision
- creating lectures
- advising post-docs
- educational admin
- educational leadership

### ISOM Teaching Activities Workbook
Annual Report of Teaching Activities - For promotion purposes, please supply a separate report for each of the last 3 years.

<table>
<thead>
<tr>
<th>Teaching Activity</th>
<th>Title/Location</th>
<th>Type of Student</th>
<th># of Teaching Events</th>
<th>Credits Allocated</th>
<th>Total Credits</th>
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<td>Facilitated Learning Activity</td>
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<td>Lecture</td>
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<td>4</td>
<td>4</td>
<td></td>
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<td>Supervised Scholarship</td>
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<td></td>
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</tr>
<tr>
<td>Mentoring</td>
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<td>50</td>
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<tr>
<td>Lab Rotation/Pre-Thesis Research and Short-term Research-Related Teaching</td>
<td># of Students: 25</td>
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<td></td>
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<tr>
<td>Educational Administration/Service Activities</td>
<td># of Positions/Committees: 5</td>
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<tr>
<td>Educational Leadership Activities</td>
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<td></td>
<td></td>
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<td>Total for Reporting Year =&gt;</td>
<td></td>
<td></td>
<td>50</td>
<td>50</td>
<td>50</td>
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</table>
Step 2: A Series of Steps

How to Use this Guide – Career Roadmaps – Disclosure!

“These tools are designed as discussion guides and advising documents. It should be noted that there is substantial variability in the milestones that different faculty members achieve on their career trajectory on the way to promotion. It is a very individual process, and assessment of success also includes an external evaluation by peers, that is not captured in this document.”
Tenure Promotion to Associate Professor
Important Milestones

Start here

Publication: Generally 2-6 high quality publications per year
Invited Presentations: 2-3 Local/Regional Invited Presentations (non CHOP/PENN)
Research: PI - Career Development Award Apply for other funding NIH/Pharma/Foundation Intramural Opportunities
Citizenship: Join research societies, review for journals

Publication: Generally 2-6 high quality publications per year – transitioning from First Author to Senior Author in Original Research
Invited Presentations: 2-3 Regional/National Invited Presentations
Research: Transition to role as PI on independent research grants
Leadership: Pursue leadership opportunities in national societies
Mentorship: Begin to mentor research trainees and junior faculty

Publication: Generally 2-6 high quality publications per year – target high-impact/respected journals in your field
Invited Presentations: 4-6 Regional/National/International Invited Presentations
Research: Maintain and grow independent research program
Leadership: Build national/international reputation with leadership roles in societies/study sections and editorial roles

Complete a minimum of 100 credits of Annual Teaching Effort
Maintain TED Scores of 2 or Above (0-4 Scale)
EXTENSION OF THE PROBATIONARY PERIODS THAT APPLY TO GRANTING OF TENURE OR PROMOTION TO ASSOCIATE PROFESSOR

1. A child is born, adopted, or placed for foster care, into the faculty member’s household and the faculty member is the primary or co-equal parental caregiver

2. Serious health condition

.....the faculty member is required to act as the primary or co-equal caregiver for a parent, child, spouse, or domestic partner (as defined in the domestic partner benefits policy); or the faculty member is unable to perform the functions of his or her position.

3. Victim of an unforeseen, catastrophic event.....such that the research project is unable to proceed or is disrupted for at least sixty days
CE Promotion to Associate Professor

Important Milestones

Start here

Year 1: Initiate Process For Re-Appointment
- Publications: Generally 3-6 high quality publications per year (50% First Author/50% Collaborative or Last w/Original and Review)
- Invited Presentations: 2-3/year Local Invited Presentations (non CHOP/PENN)
- Research: Begin to Transition off of Training Grants
  Some focus as PI/1st Author

Year 2: Initiate Process For Re-Appointment or Change in Track
- Publications: Generally 3-6 high quality publications per year (50% First Author/50% Collaborative or Last w/Original and Review)
- Invited Presentations: 2-3/year Regional/National Invited Presentations
- Research: Begin to focus on Collaborative Research
- Leadership: Build Career Foundation.

Year 3: Initiate Process For MANDATORY Promotion (see promotion checklist)
- Publications: Generally 3-6 high quality publications per year (50% First Author/50% Collaborative or Last w/Original and Review)
- Invited Presentations: 4-6/year Regional/National Invited Presentations
- Research: Continue focus on Collaborative Research
- Leadership: Demonstrate Independence

Complete a minimum of 100 credits of Annual Teaching Effort
- Maintain TED Scores of 2 or Above (0-4 Scale)
- Maintain Clinical Excellence
- Get Involved in Committees, Meetings, Departmental Initiatives
## Teaching Evaluation Data (TED)

### Question: Rate the overall quality of the teaching/presentation.

<table>
<thead>
<tr>
<th>Course/Rotation data and comments</th>
<th>n</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Mean</th>
<th>Median</th>
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<td>0.0%</td>
<td>0.0%</td>
<td>20.0%</td>
<td>80.0%</td>
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<td>Perelman School of Medicine</td>
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<td>0.5%</td>
<td>9.9%</td>
<td>31.2%</td>
<td>58.3%</td>
<td>3.5</td>
<td>4.0</td>
</tr>
</tbody>
</table>

### Question: Do you have any concerns about the professionalism of this faculty member?

<table>
<thead>
<tr>
<th>Faculty Member</th>
<th>n</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kathy Shaw</td>
<td>5</td>
<td>0</td>
<td>5</td>
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<tr>
<td>Pediatrics</td>
<td>1639</td>
<td>34</td>
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<td>Perelman School of Medicine</td>
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<td>12635</td>
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</tbody>
</table>

### Lecture

## MASTERS Lecture Data

### Question: Quality of Instructor

<table>
<thead>
<tr>
<th>Course/Rotation data and comments</th>
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<th>0</th>
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<th>Median</th>
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<td>22.2%</td>
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<td>Perelman School of Medicine</td>
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<td>19.7%</td>
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<td>3.6</td>
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</tr>
<tr>
<td></td>
<td>2647</td>
<td>0.2%</td>
<td>0.9%</td>
<td>8.9%</td>
<td>19.6%</td>
<td>70.4%</td>
<td>3.6</td>
<td>4.0</td>
</tr>
</tbody>
</table>
Learning to Teach/Mentor

Onboarding for Teaching

Teaching at the Perelman School of Medicine 101
Teaching at the Perelman School of Medicine 101 covers best practices and recommended pedagogical strategies for teaching and providing effective feedback to trainees. All course content is developed by Perelman School of Medicine faculty with expertise in specialty teaching and assessment domains. Course sessions are delivered as scheduled, online sessions with faculty facilitators. You can read more about our online course offerings and how they work here.

Topics Include
- Providing Effective Feedback
- Clinical Teaching
- Facilitating Small Groups and Seminars
- Lecturing
- Longitudinal Mentoring

Each session of this course runs for three weeks, with delivery milestones on Wednesday and Friday of each week. However, as there are no synchronous course elements where faculty are required to be online at the same time, you will have great flexibility in meeting course delivery milestones. It is not recommended, however, that you take this course while you are on service.
Summary: A Series of Steps on a Path... CE and (Tenure)

**Year 1**
- Increasing Scholarly Activity (Senior author Papers); Collaborative Research; Funding (PI on independent grants);
- Presenting your work regionally and nationally;
- Establishing research focus (& independence): Off Training grants and onto Funding/Career Development Awards; Starting to present your work

**Year 2**
- Gaining Exposure
  - Publications in Quality Journals (high Impact); Grow and maintain research collaborations (independent program); Regional/National Leadership/Invitations

**Year 3**
- Clinical Excellence (competence if MD), Citizenship, Teaching 100 credits, Mentorship
Research Promotion to Associate Professor
Important Milestones

- **Initiate Process For Re-Appointment**
  - Year 1
  - Publications: Generally 2-6 high quality publications per year (50% First Author/50% Collaborative or Last w/Original Research)
  - Invited Presentations: 2-3 Local/Regional Invited Pres.
  - Research: Actively pursue collaborative efforts
  - Citizenship: Join research societies, review for journals

- **Initiate Process For Re-Appointment or Change in Track**
  - Year 4
  - Year 5
  - Year 6
  - Publications: Generally 2-6 high quality publications per year (50% First Author/50% Collaborative or Last w/Original Research)
  - Research: Maintain collaborative research funding or pursue independent research funding
  - Citizenship: Pursue leadership opportunities in national societies

- **Initiate Process For MANDATORY Promotion (see promotion checklist)**
  - Year 7
  - Year 8
  - Year 9
  - Publications: Generally 2-6 high quality publications per year (50% First Author/50% Collaborative or Last w/Original Research)
  - Research: Maintain collaborative research funding or pursue independent research funding
  - Citizenship: Build national/international reputation with leadership roles in societies/study sections and editorial roles

Get Involved in Committees, Meetings, Departmental Initiatives [Citizenship]
Mentor graduate students, post-docs
Common Questions:
How many publications are needed for promotion to Associate Professor?

Answer -
Wide ranges - teens to over 100
Median (mean) – 45(T), 53(CE), 34(R)
Consider impact, 1st, 2nd, and last author Track
Common Questions:
What is the success rate?

Answer: Very few fail (if make it to PSOM CoAP)
Step 3: Success

Requires Assembling a Mentoring Team!

Mentee
YOU!

- Substantive Feedback
- Professional Development
- Emotional Support
- Access to Opportunities
- Intellectual Community
- Sponsorship
- Accountability for what REALLY Matters
- Role Models

National Center for Faculty Development and Diversity: www.FacultyDiversity.org
Step 3: Success – It’s not just your career

Not work/life “balance” but “integration”
Building Effective Mentoring Relationships

Core Tenets of Effective Mentee-Mentor Relationships

Emma Meagher

Ari Brooks, Kathy Shaw, and Judy Shea
(Longitudinal Mentorship Workshop PSOM101/F2F)
Step 3: Succeed...

Introducing your Panel:

Tiffani Johnson, MD, MSc
Assistant Professor in CE track

Marina Cuchel, MD, PhD, MSTR
Associate Professor in Research Track

Andy Minn, MD, PhD
Associate Professor in Tenure Track